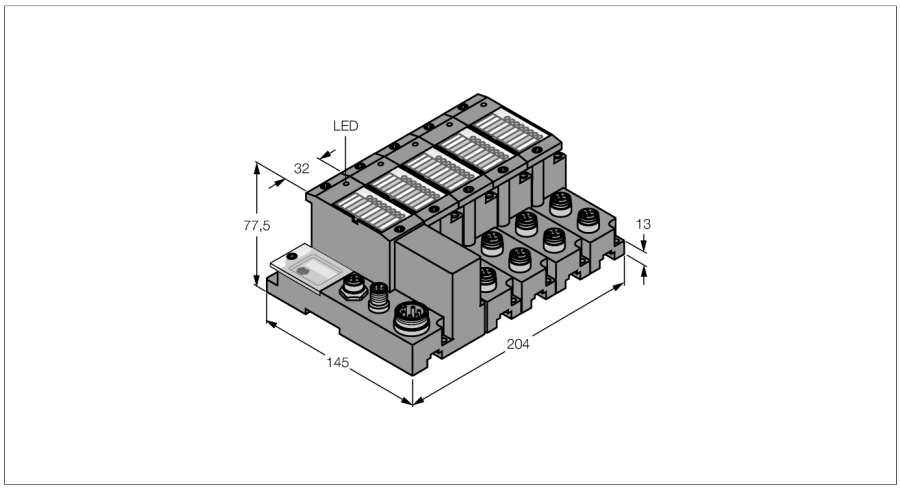
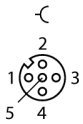
Profibus-DPV1 Set in IP67
TI-BL67-DPV1-8



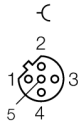
- **Cable max. 50 m between interface and read/write head**
- **3 decimal rotary coding switches for the adjustment of the Profibus address**
- **Maximum transmission rate to the field-bus 12 Mbps**
- **Two males M12 x 1, 5-pin re-verse-keyed, for fieldbus connection**
- **One male 7/8", 5-pin, for power supply**
- **LEDs for display of supply voltage, group and bus errors as well as status and diagnostics**
- **Connection of up to 8 read/write heads via BL ident M12 extension cables**
- **Mixed operation of HF and UHF read/ write heads**

Type designation	TI-BL67-DPV1-8
Ident no.	1545031
Number of channels	8
Dimensions (W x L x H)	204 x 145 x 77.5 mm
Supply voltage	24 VDC
max. system supply current $I_{mb\ (5V)}$	1.5, A
Max. sensor supply I_{sens}	4 A electronically limited current supply electronically limited current supply
max. load current I_{o}	10 A
Admissible range	18…30 VDC
Fieldbus transmission rate	9.6 kbps …12 Mbps
Fieldbus address range	1...125
Fieldbus addressing	3 decimally coded rotary switches
Service interface	RS232 interface (PS/2 socket)
Fieldbus connection technology	2 × M12, 5-pin, reverse-coded
Voltage supply connection	7/8″, 5-pin
Fieldbus termination	external
Transmission rate	115.2 kbps
Electrical isolation	isolation of electronics and field level via opto-couplers
Output connectivity	M12
Sensor supply	0.5 A per channel, short-circuit proof
Temperature derating	
> 55 °C Circulating air (Ventilation)	no limitation
> 55 °C Steady ambient air	Isens < 3A, Imb < 1A
Relative humidity	5…95 % (internal), level RH-2, no condensa-tion (when stored at 45 °C)
Vibration test	Acc. to EN 61131
Extended vibration resistance	VN 02-00 and higher
- up to 5 g (at 10 to 150 Hz)	for mounting on DIN rail no drilling according to EN 60715, with end bracket
- up to 20 g (at 10 up to 150 Hz)	for mounting on base plate or machinery Therefore every second module has to be mounted with two screws each.
Shock test	Acc. to IEC 60068-2-27
Drop and topple	acc. to IEC 68-2-31 and free fall to IEC 68-2-32
Electromagnetic compatibility	Acc. to EN 61131-2
Protection class	IP67

Wiring Diagram

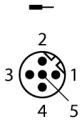


PROFIBUS-DP OUT



1 = 5 VDC
2 = GN (Bus A)
3 = GND
4 = RD (Bus B)
5 = Shield

PROFIBUS-DP



1 = n.c.
2 = GN (Bus A)
3 = n.c.
4 = RD (Bus B)
5 = Shield

Power Supply

1 = GND
2 = GND
3 = PE
4 = V_I
5 = V_O

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Profibus-DPV1 Set in IP67
TI-BL67-DPV1-8

Included in delivery	1 x end plate BL67

Functional principle

The pin resp. signal assignment results from the combination with an electronic module. You find the pin configuration and the wiring diagrams on the data sheet of the corresponding electronic module.

BL67 base modules are connected to the right of the gateway, using two screws for each module. A DIN rail is not required. This way, a compact and stable unit is built. The unit can now be mounted on a DIN rail or directly on the machine.

The field devices are connected to the base modules which are available with different connection technology (M8, M12, M23 and 7/8“).

Note

Further technical data like temperature range are determined by the electronic modules and can be found on the data sheets.

BL67 electronic modules are plugged on the purely passive base modules which in turn are connected to the field devices. The separation of connection level and electronics simplifies maintenance considerably. Flexibility is enhanced because the user can choose between base modules with different connection technologies.

The electronic modules are completely independent of the higher level fieldbus through the use of gateways.

BL67 gateways are the head component of a BL67 station. They are designed to connect the modular fieldbus nodes to the higher-level fieldbus (PROFIBUS-DP, DeviceNet, CANopen, Ethernet Modbus TCP, PROFINET, EtherCAT or EtherNet/IP).

All BL67 electronic modules communicate via the internal module bus, the data of which is transferred to the fieldbus via the gateway. All I/O modules can thus be configured independently of the bus system.

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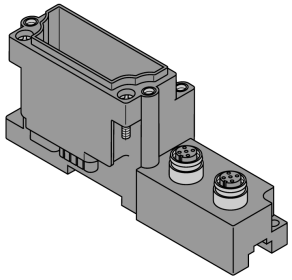
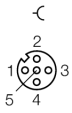
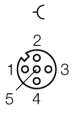
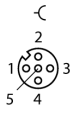
Profibus-DPV1 Set in IP67
TI-BL67-DPV1-8

Compatible base modules

Dimension drawing	Type	Pin configuration
	BL67-B-2M12 6827186 2 x M12, 5-pole, female, a-coded	…/S2500 Connectors  1 = BN (+) 2 = BK (Data) 3 = BU (GND) 4 = WH (Data) 5 = shield …/S2501 Connectors  1 = BN (+) 2 = WH (Data) 3 = BU (GND) 4 = BK (Data) 5 = shield Connectors …/S2503  1 = RD (+) 2 = BU (Data) 3 = BK (GND) 4 = WH (Data) 5 = shield

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LED display

LED	Color	Status	Meaning
D		OFF	No error message or diagnostics active.
	RED	ON	Failure of module bus communication. Check if more than 2 adjacent electronic modules are pulled. Relevant modules are located between gateway and this module.
	RED	FLASHING (0.5 Hz)	Upcoming module diagnostics
RW0 / RW1		OFF	No tag, no active diagnostics
	GREEN	ON	Tag available
	GREEN	FLASHING (2 Hz)	Data exchange with tag enabled
	RED	ON	Read/write head error
	RED	FLASHING (2 Hz)	Short-circuit in the supply line of read/write head

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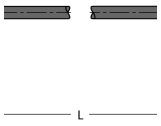
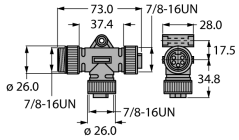
Accessories

Type code	Ident no.		Dimension drawing
RKM52-6M	6914145	Power supply cable, 7/8″ female connector, straight, 4-pin + PE, cable length: 6 m, jacket material: PUR, gray	
RSM-2RKM50	6914950	Power supply T-splitter, 1 x 7/8" male, 2 x 7/8" female, 5-pin, ampacity: 9 A, Rated voltage: 250 V, Temperature: -40 °C …+80 °C, wired in parallel	

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